

What is claimed is:

1. An oral formulation, comprising:
 - (a) a first population of carrier particles comprising said drug and a bioadhesive compound; and
 - (b) a second population of carrier particles comprising a penetration enhancer.
2. The formulation of claim 1, wherein said drug is selected from the group consisting of a protein, peptide, nucleic acid, oligonucleotide, peptide hormone, antibiotic, antimicrobial agent, vasoconstrictor, cardiovascular drug, vasodilator, enzyme, bone metabolism controlling agent, steroid hormone, antihypertensive, non-steroidal antiinflammatory agent, antihistamine, antitussive, expectorant, chemotherapeutic agent, sedative, antidepressant, beta-blocker, analgesic and angiotensin converting enzyme (ACE) inhibitor.
3. The formulation of claim 2, wherein said oligonucleotide is an antisense oligonucleotide.
4. The formulation of claim 2, wherein the penetration enhancer is selected from the group consisting of a fatty acid, bile acid, chelating agent and non-chelating non-surfactant.
5. The formulation of claim 4, wherein said fatty acid is selected from the group consisting of arachidonic acid, oleic acid, lauric acid, capric acid, caprylic acid, myristic acid, palmitic acid, stearic acid, linoleic acid, linolenic acid, dicaprate, tricaprate, monoolein, dilaurin, glyceryl 1-monocaprate, 1-dodecylazacycloheptan-2-one, an acylcarnitine, an acylcholine, a monoglyceride and a pharmaceutically acceptable salt thereof.
6. The formulation of claim 4, wherein said bile acid is selected from the group consisting of cholic acid, dehydrocholic acid, deoxycholic acid, glucolic acid, glycholic acid, glycodeoxycholic acid, taurocholic acid, taurodeoxycholic acid, chenodeoxycholic acid,

ursodeoxycholic acid, sodium tauro-24,25-dihydrofusidate, sodium glycodihydrofusidate, polyoxyethylene-9-lauryl ether and a pharmaceutically acceptable salt thereof.

7. The formulation of claim 4, wherein said chelating agent is selected from the group consisting of EDTA, citric acid, a salicylate, an *N*-acyl derivative of collagen, laureth-9, an *N*-amino acyl derivative of a beta-diketone and a mixture thereof.

8. The formulation of claim 4, wherein said non-chelating non-surfactant is selected from the group consisting of an unsaturated cyclic urea, 1-alkyl-alkanone, 1-alkenylazacycloalkanone, steroid anti-inflammatory agent and mixtures thereof.

9. The formulation of claim 1, wherein said formulation is a capsule, tablet, compression coated tablet or bilayer tablet.

10. The formulation of claim 1, wherein said bioadhesive is selected from the group consisting of polyacrylic polymers, poly(acrylic acid), tragacanth, cellulose, polyethyleneoxide cellulose derivatives, karia gum, starch, gelatin pectin, latex, chitosan, sodium alginate and a receptor-binding peptide.

11. The formulation of claim 1, wherein said cellulose derivative is selected from the group consisting of methylcellulose, carboxymethylcellulose, hydroxypropylmethylcellulose (HPMC), hydroxyethylcellulose (HEC), hydroxypropylcellulose (HPC) and sodium carboxymethylcellulose (NaCPC).

12. The formulation of claim 1, wherein said first population of carrier particles and/or said second population of carrier particles further comprise a lubricant.

13. The formulation of claim 1, wherein said first population of carrier particles and/or said second population of carrier particles are enteric coated.

14. The formulation of claim 1, wherein said carrier particles are incorporated into an oral dosage form.
15. The formulation of claim 14, wherein said oral dosage form is selected from the group consisting of a tablet, capsule and gelcap.
16. A method for enhancing the intestinal absorption of a drug in an animal, comprising orally administering the formulation of claim 1 to said animal.
17. The method of claim 16, wherein said animal is a mammal.
18. The method of claim 17, wherein said mammal is a human.
19. The method of claim 16, wherein said first population of carrier particles and said second population of carrier particles are administered separately.
20. The method of claim 16, wherein said first population of carrier particles and said second population of carrier particles are administered in a single dosage form.
21. The method of claim 16, wherein said drug is selected from the group consisting of a protein, peptide, nucleic acid, oligonucleotide, peptide hormone, antibiotic, antimicrobial agent, vasoconstrictor, cardiovascular drug, vasodilator, enzyme, bone metabolism controlling agent, steroid hormone, antihypertensive, non-steroidal antiinflammatory agent, antihistamine, antitussive, expectorant, chemotherapeutic agent, sedative, antidepressant, beta-blocker, analgesic and angiotensin converting enzyme (ACE) inhibitor.
22. The method of claim 16, wherein said penetration enhancer is selected from the group consisting of a fatty acid, bile acid, chelating agent and non-chelating non-surfactant.

23. The method of claim 16, wherein said bioadhesive is selected from the group consisting of polyacrylic polymers, poly(acrylic acid), tragacanth, cellulose, polyethyleneoxide cellulose derivatives, karyo gum, starch, gelatin pectin, latex, chitosan, sodium alginate and a receptor-binding peptide.

24. The method of claim 21, wherein said oligonucleotide is an antisense oligonucleotide.